

Date: Monday, 11/12/2007 11:45:43 AM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: STEP SPACER		
Job Number	: 35615					
Estimate Number	: 10378					
P.O. Number	: N/A		Part Number	: D30653		
This Issue	: 11/12/2007 S.O. No. : N/A		Drawing Number	: D3065 REV. B		
Prsht Rev.	: NC		Project Number	: N/A		
First Issue	: N/A		Drawing Revision	: B		
Previous Run	: 33820		Material	: N/A		
Written By			Due Date	: 11/30/2007 Qty: 250 Um: Each		
Checked & Approved By			: 07.11.12			
Comment			: Est:C 02.11.01 Incorporated D3066-1 IPP KJ/RF Est Rev:D Now on Water Jet 06-04-11 JLM			

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING
Comment: ISSUE P.O. 5022 GFI CUT AND FORM PER DRWG D3065 REV.B		
2.0	D30653	Step Spacer
Comment: Qty.: 1.0000 Each(s)/Unit Total : 250.0000 Each(s) Step Spacer		
3.0	PACKAGING 1	PACKAGING RESOURCE #1
Comment: PACKAGING RESOURCE #1 RECEIVE AND INSPECT FOR TRANSIT DAMMAGE ENSURE MATERIAL CERTIFICATION ATTACHED		
4.0	QC6	DIMENSIONAL CHECK
Comment: DIMENSIONAL CHECK		
5.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: DA Date: 08/01/04  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/12/2007 11:45:43 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP SPACER

Job Number: 35615

Part Number: D30653

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT CHEMICAL CONVERSION COAT

mf

08-01-03

7.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

mf

08-01-03

250

8.0 QC21

FINAL INSPECTION/W/O RELEASE



250

Comment: FINAL INSPECTION/W/O RELEASE

Da8/01/04

Job Completion



2008/1/14

W

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	35615
Description: Step Spacer	Part Number:	D3065-3
Inspection Dwg: D3065	Rev: B	Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

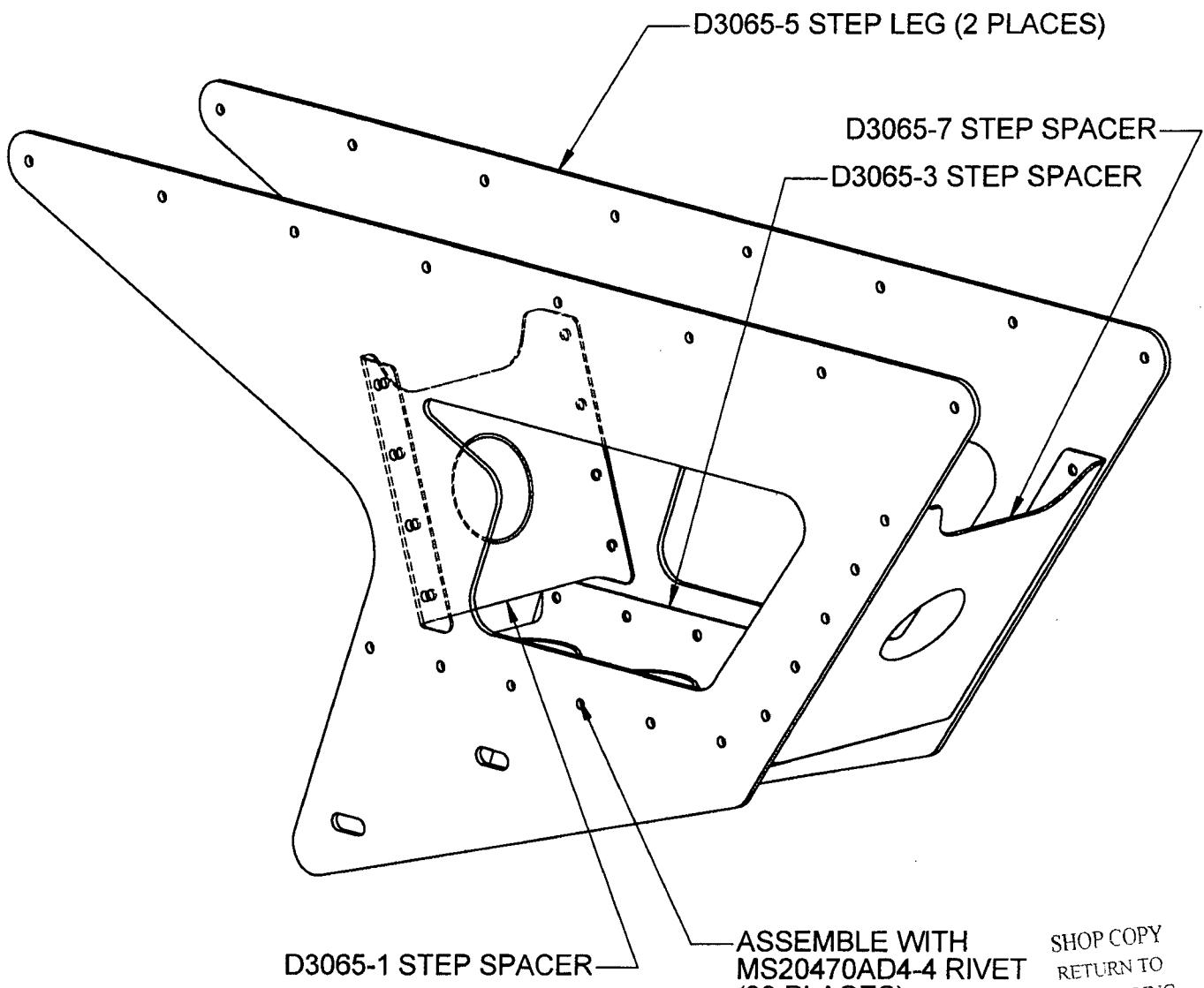
X First Article  Prototype

Measured by:	Audited by:	Prototype Approval:	N/A
Date:	Date:	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.02.25	New Issue P/O D3065-041	KJ/RF	
B	04.08.12	Removed dimension 1.204	KJ/JLM	
C	06.06.23	Dwg Rev. changed	KJ/JLM	
D	07.09.06	0.040 dimension added	KJ/JLM	EE

**DART**

DESIGN	1P	DRAWN BY	CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	APPROVED	<del>PH</del>	DRAWING NO. D3065	REV. B SHEET 1 OF 5
DATE	06.05.23	TITLE	STEP LEG ASSEMBLY	SCALE 1:2	

**RELEASED**06.06.20 ~~PH~~**D3065-041 STEP LEG ASSEMBLY**

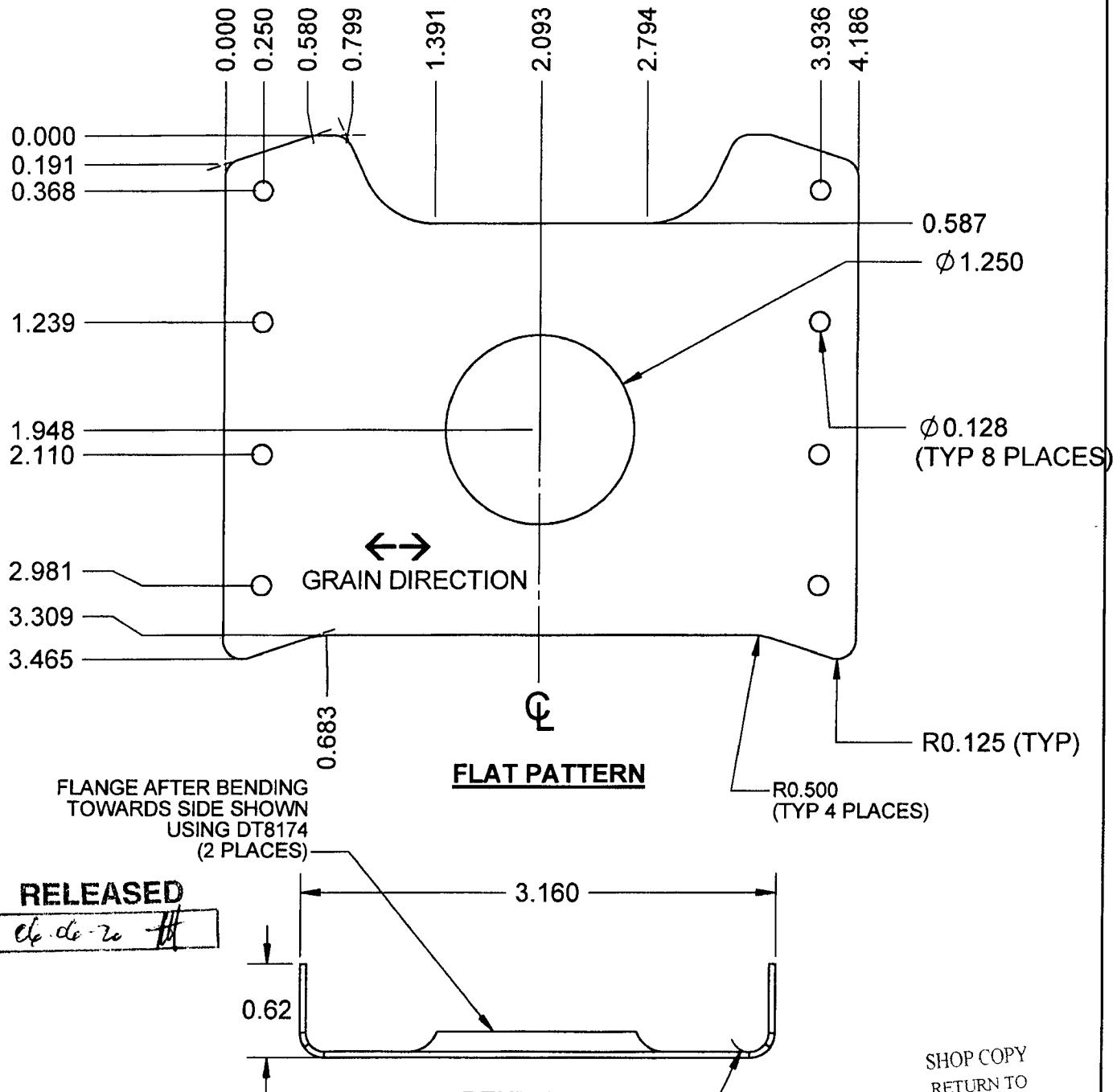
SHOP COPY  
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 35615

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**DART**

DESIGN	1P	DRAWN BY	CB	DART AEROSPACE LTD	
CHECKED	PH	APPROVED	<del>CH</del>	DRAWING NO.	REV. B
DATE	06.05.23	TITLE	D3065	STEP LEG ASSEMBLY	SCALE 1:1

**D3065-1 STEP SPACER**

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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WITHOUT NOTICE

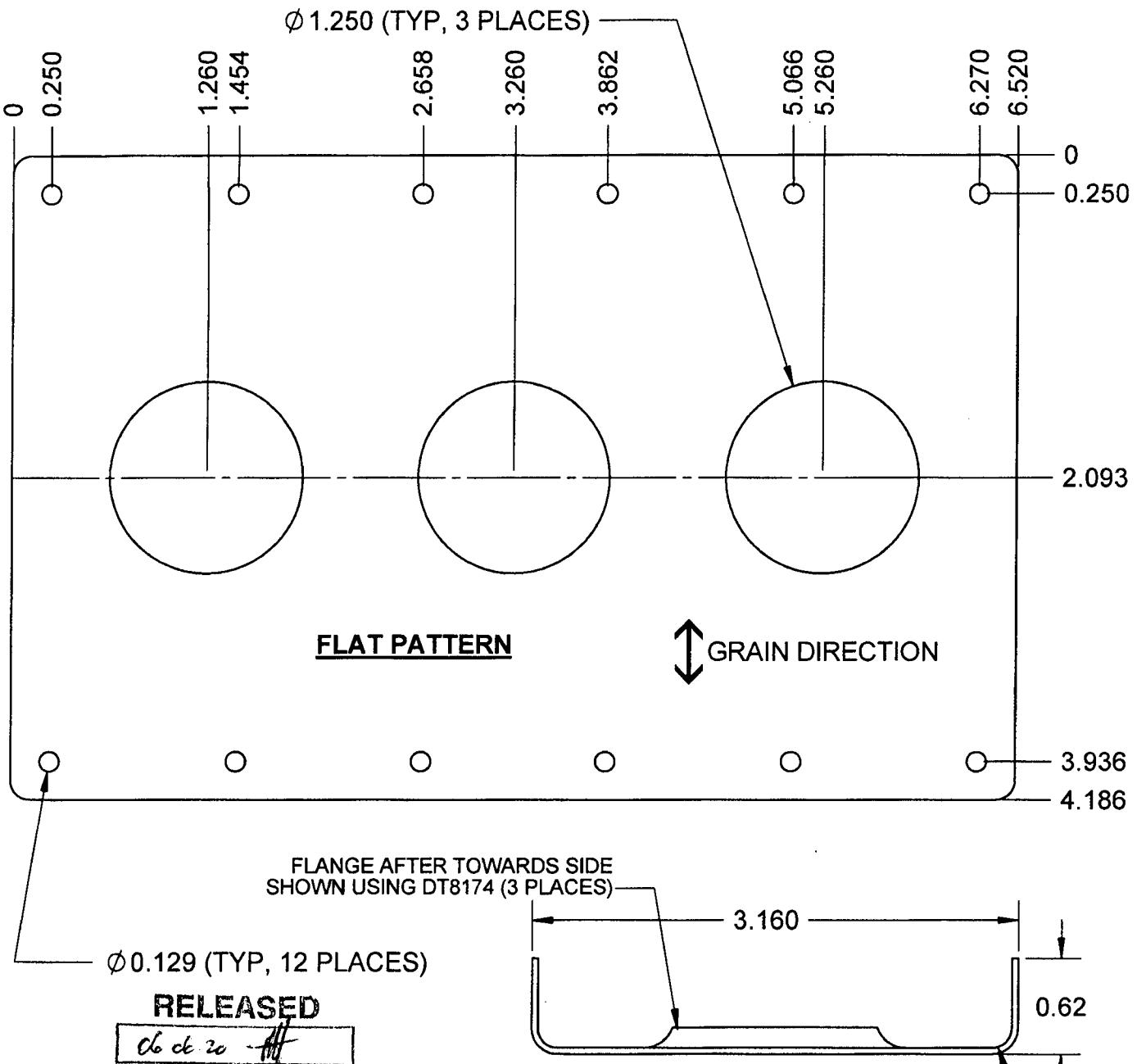
WORK ORDER  
NO 35615

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**DART**

DESIGN <i>IP</i>	DRAWN BY <i>CB</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>PH</i>	APPROVED <i>MM</i>	DRAWING NO. <b>D3065</b>	REV. B SHEET 3 OF 5
DATE 06.05.23		TITLE <b>STEP LEG ASSEMBLY</b>	SCALE 1:1

**D3065-3 STEP SPACER**

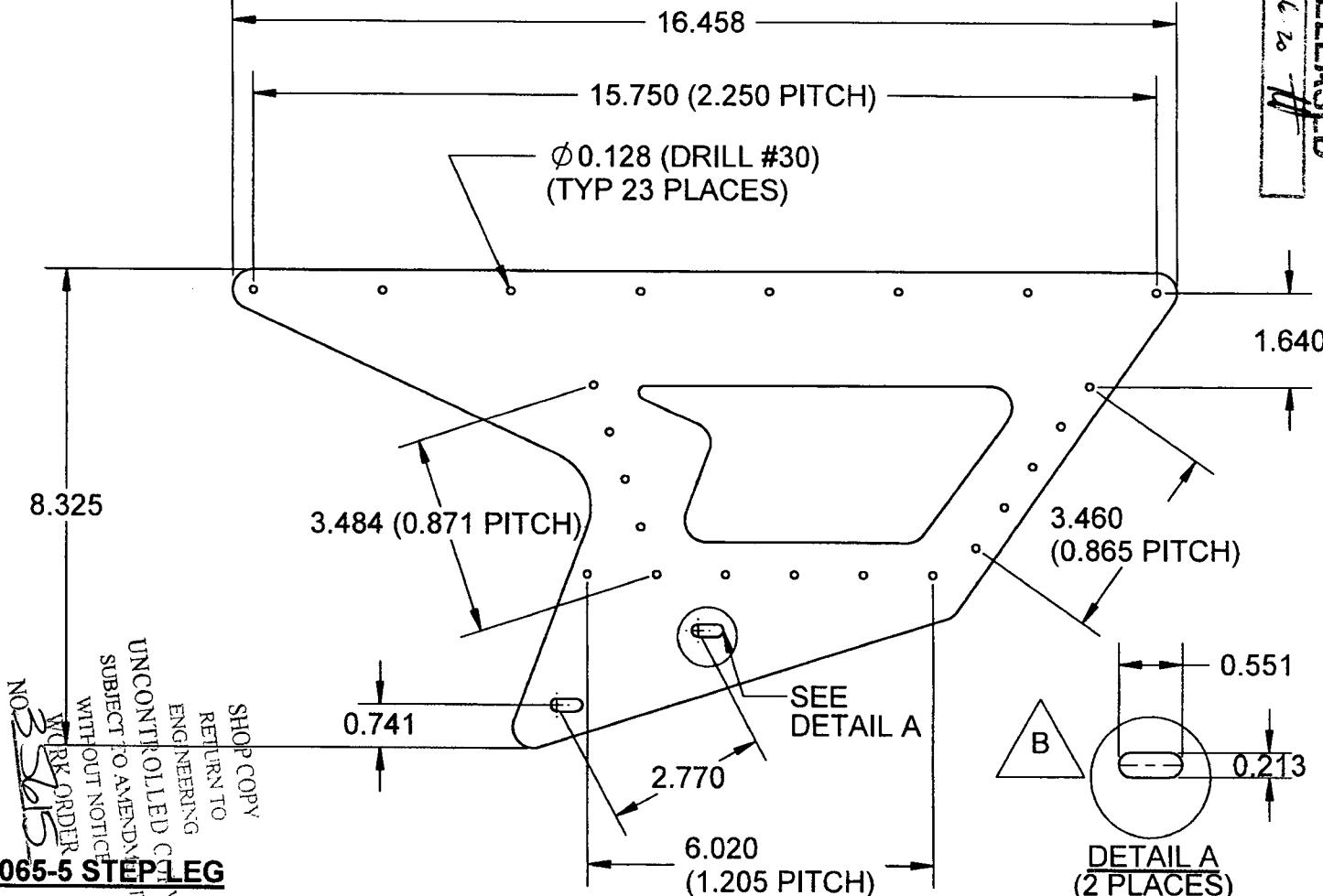
- 1) MATERIAL: 2024-T3 (QQ-A-250/4)  
0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

**BEND DETAIL**

R0.125 ENGINEERING  
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WORK ORDER  
NO. 35615

**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD
41	C.B	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
PH	JK	D3065
DATE	06.05.23	TITLE
		STEP LEG ASSEMBLY
		REV. B
		SHEET 4 OF 5
		SCALE 1:3

**RELEASED**  
06.06.20**D3065-5 STEP LEG**

- 1) MACHINE PÉR DWG FILE "D3065-5.SLDPRT"
- 2) MATERIAL: 6061-T6 (PER QQ-A-250/11 OR AMS 4025 OR AMS 4027) 0.080" THICK (REF DART SPEC M6061T6S.080)  
OR  
5052-H32 (PER QQ-A-250/8 OR AMS 4016) 0.080 THICK (REF DART SPEC. M5052H32S.080)
- 3) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES



## DESIGN

DESIGN  
*IP*

# DART AEROSPACE LTD

HAWKESBURY, ONTARIO, CANADA

**CHECKED**

270

DATE

06.05.23

**NAME**

REV. B

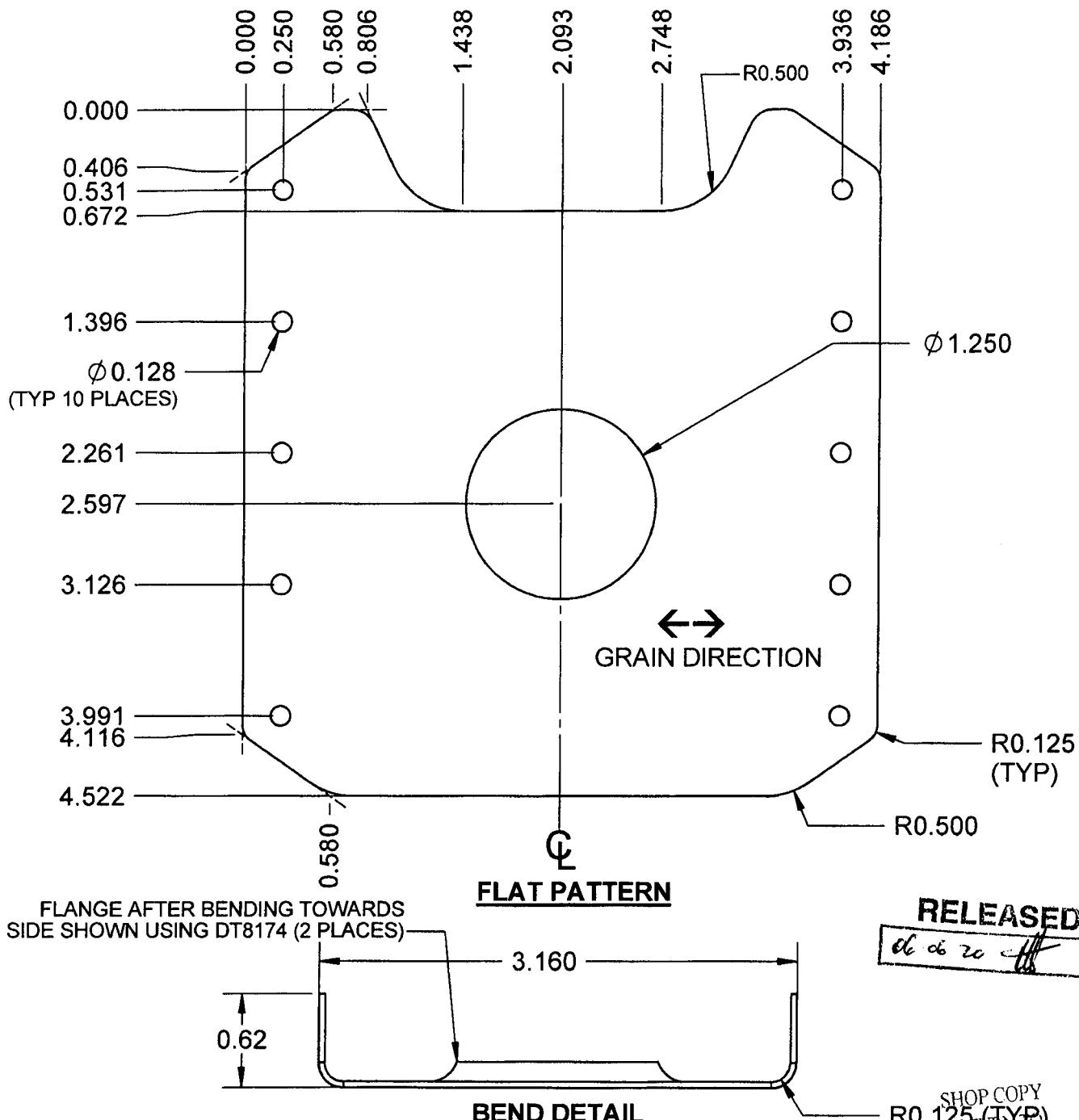
SHEET 5 OF 5

SCALE

SCALE

**TITLE**

**STEP LEG ASSEMBLY**



## **D3065-7 STEP SPACER**

- 1) MATERIAL: 2024-T3 (PER QQ-A-250/4) 0.040 THICK (REF DART SPEC.)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

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ENGINEERING  
024T3S040) ED COPY  
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 35615

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180 AVENUE LABROSSE  
POINTE-CLAIRE, QUÉ., CANADA H9R 1A1  
TÉL.: (514) 630-4877 - FAX: (514) 630-4849

GFI est une division de Thomas & Betts Fabrication Inc. / GFI is a division of Thomas & Betts Manufacturing Inc.



### BON DE LIVRAISON - SHIPPING MEMO

DATE DE LIVRAISON SHIPPING DATE	N° BON DE LIVRAISON SHIPPING MEMO NO.
2007/12/14	0381182

VENDU À / SOLD TO

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON, K6A 1K7

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON, K6A 1K7

EXPÉDIÉ À / SHIPPED TO

CODE DE CLIENT CUSTOMER CODE	N° DE CONTRAT JOB NO.	N° COMMANDE PO NO.	VIA SHIP VIA
DART GFI-0299	JO171921	PO00005022	
QUANTITÉ QUANTITY	VOTRE N° DE PIÈCE YOUR PART NO.	DESCRIPTION	
250	D30653	STEP SPACER CERTIFICATE OF CONFORMANCE REQ	

TOUTES LES RÉCLAMATIONS DOIVENT ÊTRE FAITES EN DEDANS DE 5 JOURS DE LA RECEPTE  
ALL CLAIMS MUST BE MADE WITHIN 5 DAYS OF RECEIPT OF GOODS.

REÇU PAR / RECEIVED BY

# CERTIFICATE OF COMPLIANCE

## CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE  
POINTE CLAIRE, QC  
H9R 1A1

**DART AEROSPACE LTD**  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO.	2	OUR JOB NO	J0171921	SHIPPING MEMO	0381182	
ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
-	250 PCS	PO00005022	D30653	B	STEP SPACER	B
MATERIAL		SUPPLIED BY			MAT. REL. NO.	
AL 2024-T3 (QQ-A-250/4)		SAMUEL / KAISER ALUMINUM			413490A4, 388406A1, 395420A3	
1	PROCESS	FIRST ARTICLE INSPECTION REPORT ON FILE	PROCESSOR	GFI	RELEASE NOTE #	CONFORMS
2						
3						
4						
5						
6						
7						
8						
9						

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 14 DECEMBER 2007

G.F.I. Q.C. REP.

*Lawan Hart*



Programme d'Assurance Qualité Enregistré / Registered Q.A. Program  
ISO 9001:2000 AS9100

**LETTRE DE CONFORMITÉ –LETTER OF COMPLIANCE**

Date: 17 JUILLET 2007

Company Name: G.F.I. Division of Thomas & Betts limited  
Address: 180 avenue Labrosse  
City: Pointe Claire, Qué.  
Zip Code: H9R 1A1

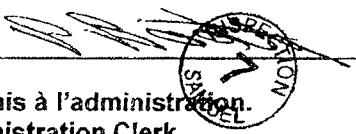
# du client: 71991 # de commande SSMQ: 870053  
Customer's order #: SSMQ's Order #:

La présente est pour certifier que le matériel détaillé ci-dessous est conforme aux exigences de votre commande et des normes du grade tel que décrit:

The following is to certify that the material listed below meets your order requirements and grade standards as described:

Notre/Our Item #	# de pièces/ # of pieces	Épaisseur/Grandeur Guage/Size	Alliage/Trempe Alloy/Temper	Spécification / Specification	Lot/Heat
3	5	.040" X 48" X 144"	2024 T3	AMS-QQ-A-250/4	395420A3

Bien à vous,  
Yours truly,

  
Commis à l'administration.  
Administration Clerk.

SHIP TO: SAMUEL MISSISSAUGA 2360 DIXIE ROAD MISSISSAUGA, ON, CA L4Y1Z7
SOLD TO: SAMUEL LAVAL 2225 FRANCIS HUGHES LAVAL, PQ, CA H7S1N5

**KAISER**  
**ALUMINUM**  
Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4089691

BL 100910

CUSTOMER PO NUMBER:		WORK PACKAGE:		CUSTOMER PART NUMBER:		SHIP RUN/LOAD ID:	GOV'T CONTRACT NUMBER:
N19210						100910/6	
KAISER ORDER NO:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:	
1047772	5	20-FEB-2007	2024	BARE	T3	MILL FINISH_COIL	
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	GAUGE:	WIDTH:	LENGTH:		
2752 LB	1 PCS EST.	2011769	0.0400 IN	48.000 IN	0.000 IN		

### Certified Specifications

AMS 4037/RevN  
CMMP 019/RevD

AMS-QQ-A-250/4/RevA  
CMMP 025/RevQ

ASTM B 209/Rev06

Test Code: 1504

### Test Results

Lot: 395420A3 Cast 364 Drop 30 Ingot 2

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	68.2 : 68.6 (470 : 473)	46.9 : 47.1 (323 : 325)	17.5 : 17.6

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.09	0.20	4.49	0.53	1.28	0.01	0.22	0.02	0.01	0.00	TOT 0.03

### ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024 MIN	0.00	0.00	3.80	0.30	1.20	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX	0.50	0.50	4.90	0.90	1.80	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

### CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

*Bill Poynor*

250-01



Programme d'Assurance Qualité Enregistré / Registered Q.A. Program  
ISO 9001:2000 AS9100

**LETTRE DE CONFORMITÉ – LETTER OF COMPLIANCE**

Date: 8 MARS 2007

**Company Name:** G.F.I. Division of Thomas & Betts limited  
**Address:** 180 avenue Labrosse  
**City:** Pointe Claire, Qué.  
**Zip Code:** H9R 1A1

**# du client:** 0071253      **# de commande SSMQ:** 865767  
**Customer's order #:** SSMQ's Order #:

La présente est pour certifier que le matériel détaillé ci-dessous est conforme aux exigences de votre commande et des normes du grade tel que décrit:

The following is to certify that the material listed below meets your order requirements and grade standards as described:

Notre/Our Item #	# de pièces/ # of pieces	Épaisseur/Grandeur Guage/Size	Alliage/Trempe Alloy/Temper	Spécification / Specification	Lot/Heat
3	2	.040" X 48" X 144"	2024 T3	AMS-QQ-A-250/4	388406A1

Bien à vous,  
Yours truly,



Christie Griffiths

Commis à l'administration.  
Administration Clerk.

SHIP TO:  
 SAMUEL MISSISSAUGA  
 2360 DIXIE ROAD  
 MISSISSAUGA, ON, CA L4Y1Z7

SOLD TO:  
 SAMUEL LAVAL  
 2225 FRANCIS HUGHES  
 LAVAL, PQ, CA H7S1N5

**KAISER**  
**ALUMINUM**

Trentwood Works - Spokane, WA 99215  
 Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
 4086065

PL 100 875

CUSTOMER PO NUMBER:		WORK PACKAGE:		CUSTOMER PART NUMBER:		SHIP RUN/LOAD ID:	GOV'T CONTRACT NUMBER:
N19104						100875/4	
KAISER ORDER NO:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:	
1046025	1	16-JAN-2007	2024	BARE	T3	MILL FINISH_COIL	
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:		GAUGE:	WIDTH:	LENGTH:	
3740 LB	1 PCS EST.	2011243	0.0400 IN	48.000 IN	0.000 IN		

### Certified Specifications

AMS 4037/RevN  
 CMMP 019/RevD

AMS-QQ-A-250/4/RevA  
 CMMP 025/RevQ

ASTM B 209/Rev06

Test Code: 1504

### Test Results

Lot: 388406A1 Cast 358

Drop 11

Ingot 3

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	68.2 : 68.4 (470 : 472)	46.9 : 47.0 (323 : 324)	16.2 : 18.3
Chemistry:	Actual	SI 0.08 FE 0.22 CU 4.40 MN 0.57 MG 1.32 CR 0.01	ZN 0.21	TI 0.02	V 0.01 ZR 0.00 TOT 0.06 OTHER 0.06

### ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024 MIN	0.00	0.00	3.80	0.30	1.20	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX	0.50	0.50	4.90	0.90	1.80	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

### CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER. ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY, THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

*Bill Poynor*



Programme d'Assurance Qualité Enregistré / Registered Q.A. Program  
ISO 9001:2000 AS9100

*LETTER OF CONFORMITÉ – LETTER OF COMPLIANCE*

Date: 20 NOVEMBRE 2007

**Company Name:** G.F.I. Division of Thomas & Betts limited  
**Address:** 180 avenue Labrosse  
**City:** Pointe Claire, Qué.  
**Zip Code:** H9R 1A1

# du client: 72573 # de commande SSMQ: 873720  
Customer's order #: SSMQ's Order #:

La présente est pour certifier que le matériel détaillé ci-dessous est conforme aux exigences de votre commande et des normes du grade tel que décrit:

The following is to certify that the material listed below meets your order requirements and grade standards as described:

Bien à vous,  
Yours truly,

**Commis à l'administration.  
Administration Clerk.**



LES MÉTAUX SPÉCIALISÉS SAMUEL, 21525 CLARK-GRAHAM, BAIE D'URFÉ, QUÉBEC H9X 3T5

TÉL: 514-457-3399  
FAX: 514-457-9393

LET. DE. COM 12/01/04

SHIP TO:  
 SAMUEL MISSISSAUGA  
 2360 DIXIE ROAD  
 MISSISSAUGA, ON, CA L4Y1Z7

SOLD TO:  
 SAMUEL MISSISSAUGA  
 2360 DIXIE ROAD  
 MISSISSAUGA, ON, CA L4Y1Z7

**KAISER**  
**ALUMINUM**

Trentwood Works - Spokane, WA 99215  
 Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
 4107888

CUSTOMER PO NUMBER:		WORK PACKAGE:		CUSTOMER PART NUMBER:		SHIP RUN/LOAD ID:		GOVT CONTRACT NUMBER:	
N20042						101068/16			
KAISER ORDER NO:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:			
1055568	9	10-SEP-2007	2024	BARE	T3	MILL FINISH_COIL			
WEIGHT SHIPPED:	QUANTITY:	BL NUMBER:	GAUGE:	WIDTH:		LENGTH:			
4385 LB	1 PCS EST.	2014374	0.0400 IN	48.000 IN		0.000 IN			

### Certified Specifications

AMS 4037/RevN  
 CMMP 019/RevD

AMS-QQ-A-250/4/RevA  
 CMMP 025/RevR

ASTM B 209/Rev06

Test Code: 1504

### Test Results

Lot: 413490A4 Cast 392

Drop 05

Ingot 3

#### (ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	68.4 : 69.0 (472 : 476)	47.5 : 47.9 (328 : 330)	16.6 : 17.7

#### (ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.22	4.6	0.54	1.3	0.02	0.21	0.01	0.01	0.01	0.03

### ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024 MIN	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

### Aluminum Remainder

### CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR